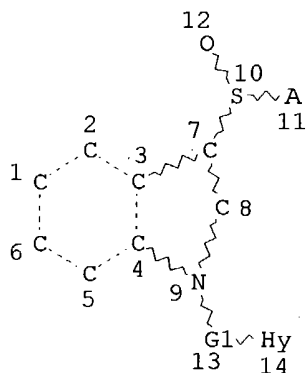


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 L3 STR



REP G1=(0-5) CH  
 NODE ATTRIBUTES:  
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 GGCAT IS MCY SAT AT 14  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE

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 FULL SCREEN SEARCH COMPLETED - 16104 TO ITERATE

100.0% PROCESSED 16104 ITERATIONS 100 ANSWERS  
 SEARCH TIME: 00.00.01

L5 100 SEA SSS FUL L3

=> fil caplus  
 COST IN U.S. DOLLARS  
 FULL ESTIMATED COST

| SINCE FILE ENTRY | TOTAL SESSION |
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| 156.68           | 156.89        |

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FILE COVERS 1907 - 5 Nov 2004 VOL 141 ISS 20  
FILE LAST UPDATED: 4 Nov 2004 (20041104/ED)

This file contains CAS Registry Numbers for easy and accurate  
substance identification.

=> s 15

L6 3 L5

=> d bib abs 1-3

L6 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:80650 CAPLUS

DN 140:146005

TI Preparation of 1-heterocyclylalkyl-3-sulfonylindoles and indazoles as  
5-HT6 ligands

IN Bernotas, Ronald Charles; Lenicek, Steven Edward

PA Wyeth, John, and Brother Ltd., USA

SO PCT Int. Appl., 46 pp.

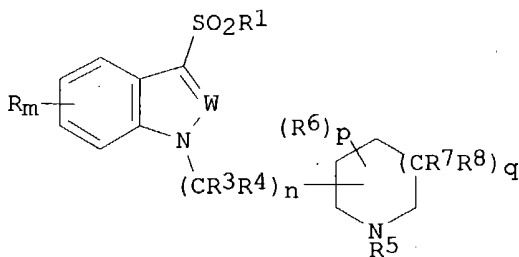
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

|      | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|------|---|------|----------|-----------------|----------|
| PI   | WO 2004009548   | A1   | 20040129 | WO 2003-US22485 | 20030717 |
|      | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,<br>CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,<br>GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,<br>LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,<br>PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,<br>TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY,<br>KG, KZ, MD, RU |      |          |                 |          |
|      | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,<br>CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,<br>NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,<br>GW, ML, MR, NE, SN, TD, TG   |      |          |                 |          |
|      | US 2004024023   | A1   | 20040205 | US 2003-621698  | 20030717 |
| PRAI | US 2002-396958P   | P    | 20020718 |                 |          |
| OS   | MARPAT 140:146005   |      |          |                 |          |
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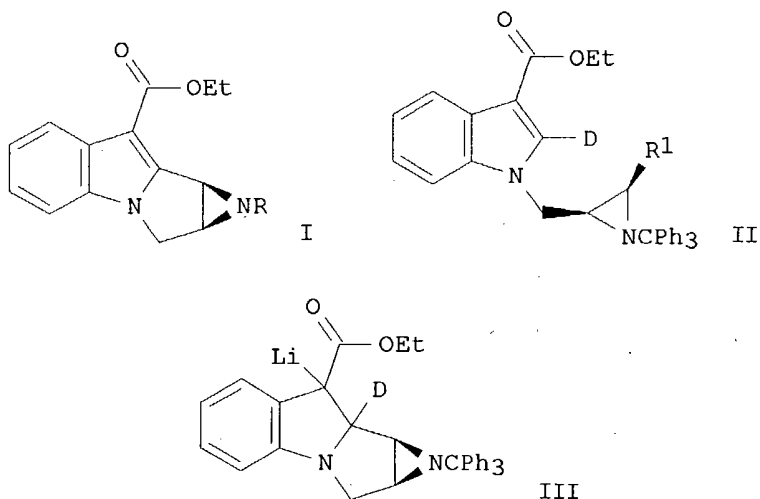
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AB Title compds. [I; W = N, CR2; R = halo, cyano, OCO2R9, CO2R10, CONR11R12,  
SOxR13, NR14R15, OR16, COR17, (substituted) alkyl, alkenyl, alkynyl,  
cycloalkyl, aryl, heteroaryl; R1 = (substituted) alkyl, cycloalkyl, aryl,  
heteroaryl, etc.; R2 = H, halo, (substituted) alkyl, alkoxy, cycloalkyl,

aryl, heteroaryl; R3, R4 = H, (substituted) alkyl; R5 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloheteroalkyl, aryl, heteroaryl; R6 = (substituted) alkyl, cycloalkyl, alkenyl, alkynyl; R7, R8 = H, (substituted) alkyl, cycloalkyl, alkenyl, alkynyl; m, n, p = 0-3; q, x = 0-2; R9, R10, R13, R17 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloheteroalkyl, aryl, heteroaryl; R11, R12, R14, R15 = H, (substituted) alkyl; NR11R12, NR14R15 = 5-7 membered ring; R16 = (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloheteroalkyl, aryl, heteroaryl; R18 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloheteroalkyl, aryl, heteroaryl], were prepared Thus, 3-(phenylsulfonyl)-1H-indole (preparation given) in DMF at 0° was treated with sodium hydride in mineral oil stirred for 2 h at ambient temperature, treated with

4-(toluene-4-sulfonyloxymethyl)piperidine-1-carboxylic acid tert-Bu ester and the mixture was stirred for 16 h at 55° to give tert-Bu 4-[3-(phenylsulfonyl)-1H-indol-1-ylmethyl]piperidine-1-carboxylate. The latter was stirred with 4N HCl in dioxane to give 82% 3-(phenylsulfonyl)-1-(piperidin-4-ylmethyl)-1H-indole hydrochloride, which showed 5-HT6 binding with  $K_i = 27$  nM.

L6 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2004:45418 CAPLUS  
 DN 140:253368  
 TI Synthesis of the Aziridinomitosenone Skeleton by Intramolecular Michael Addition of  $\alpha$ -Lithioaziridines: An Aromatic Route Featuring Deuterium as a Removable Blocking Group  
 AU Vedejs, Edwin; Little, Jeremy D.  
 CS Department of Chemistry, University of Michigan, Ann Arbor, MI, 48109, USA  
 SO Journal of Organic Chemistry (2004), 69(6), 1794-1799  
 CODEN: JOCEAH; ISSN: 0022-3263  
 PB American Chemical Society  
 DT Journal  
 LA English  
 GI



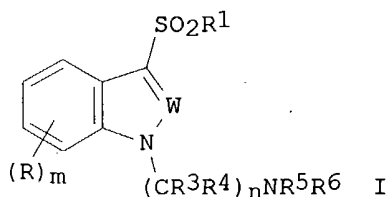
AB A convergent synthetic route to the 1,2-aziridinopyrrolo[1,2-a]indole I (R = CPh3) has been developed. Key features of this route include the deuterium kinetic isotope effect to block undesired indole lithiation

during tin-lithium exchange from indole II (R1 = SnBu3) to II (R1 = Li), the intramol. Michael addition to generate enolate III, and conversion into I (R = CPh3) by trapping with phenylselenenyl chloride. Reductive cleavage of the N-trityl group in I (R = CPh3) allows access to tetracyclic aziridinomitosenes containing the aziridine N-H subunit. Reduction of the C(9) ester in I (R = CPh3) with LAH gives the primary alc. with the correct C(9), C(9a), C(10) oxidation state corresponding to the aziridinomitosenes, and deprotection of I (R = CPh3) affords I (R = H).

RE.CNT 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2003:972055 CAPLUS  
DN 140:27760  
TI 1-(Aminoalkyl)-3-sulfonylindole and -indazole derivatives as  
5-hydroxytryptamine-6 ligands  
IN Bernotas, Ronald Charles; Lenicek, Steven Edward; Antane, Schuyler A.;  
Zhou, Ping; Li, Yanfang  
PA Wyeth, John, and Brother Ltd., USA  
SO PCT Int. Appl., 59 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

|      | PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE     |
|------|--|------|----------|-----------------|----------|
| PI   | WO 2003101962  | A1   | 20031211 | WO 2003-US17472 | 20030603 |
|      | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,<br>CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,<br>GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,<br>LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,<br>PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,<br>TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ,<br>MD, RU, TJ, TM<br>RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,<br>CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,<br>NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,<br>GW, ML, MR, NE, SN, TD, TG |      |          |                 |          |
|      | US 2003232828  | A1   | 20031218 | US 2003-453009  | 20030603 |
|      | US 6727246   | B2   | 20040427 |                 |          |
| PRAI | US 2002-385695P  | P    | 20020604 |                 |          |
| OS   | MARPAT 140:27760   |      |          |                 |          |
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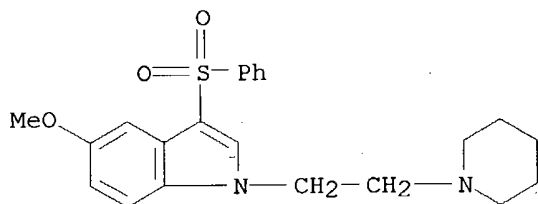


AB The present invention relates to the preparation of aminoalkyl indole and indazole I (W = N or substituted C; m = 1-3; n = 2-5; R = H, halogen, CN, C1-C6alkyl, C2-C6 alkenyl etc.; R1 = C1-C6 alkyl, C3-C7 cycloalkyl, aryl etc.; R2 = H, halogen, or a C1-C6 alkyl, C1-C6 alkoxy etc.; R3, R4 = H or C1-C6 alkyl group; R5, R6 = H or C1-C6 alkyl group, C2-C6 alkenyl etc.), and the use thereof for the treatment of central nervous system disorders related to or affected by the 5-HT6 receptor. Thus, (Rm = H, R1 =

1-naphthyl, R2 = H, n = 2, R5 = R6 = CH3) (mp 239-241°) prepared by reacting corresponding indole derivative with N,N-dimethyl-2-chloroethylamine showed 5-HT6 binding Ki of 4 nM compared to 6.0 nM for clozapine.  
 RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

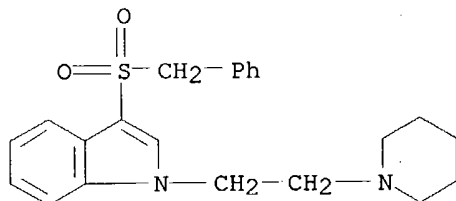
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L6 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN  
 IT **633291-90-4P 633291-99-3P 633292-27-0P,**  
 6-Chloro-1-(3-(morpholin-4-yl)propyl)-3-(phenylsulfonyl)-1H-indole  
**633292-28-1P,** 5-Methoxy-3-(phenylsulfonyl)-1-(3-(pyrrolidin-1-yl)propyl)-1H-indole **633292-31-6P,** 5-Methoxy-3-(phenylsulfonyl)-1-(2-(pyrrolidin-1-yl)ethyl)-1H-indole **633292-39-4P,**  
 3-(Phenylsulfonyl)-1-(2-(piperidin-1-yl)ethyl)-1H-indole  
**633292-42-9P,** 6-Chloro-1-(2-(morpholin-4-yl)ethyl)-3-(phenylsulfonyl)-1H-indole **633292-43-0P,** 3-(Phenylsulfonyl)-1-(3-(piperidin-1-yl)propyl)-1H-indole  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (aminoalkyl-sulfonylindole and -indazole derivs. as 5-hydroxytryptamine-6 ligands)  
 RN 633291-90-4 CAPLUS  
 CN 1H-Indole, 5-methoxy-3-(phenylsulfonyl)-1-[2-(1-piperidinyl)ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)



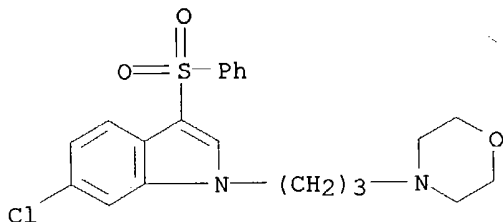
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RN 633291-99-3 CAPLUS  
 CN 1H-Indole, 3-[(phenylmethyl)sulfonyl]-1-[2-(1-piperidinyl)ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)

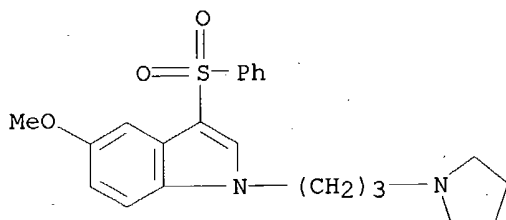


● HCl

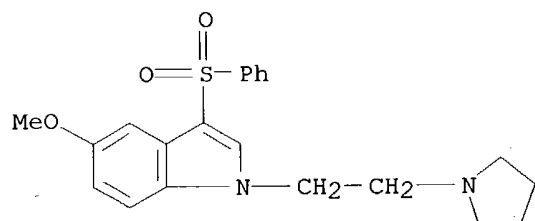
RN 633292-27-0 CAPLUS  
CN 1H-Indole, 6-chloro-1-[3-(4-morpholinyl)propyl]-3-(phenylsulfonyl)- (9CI)  
(CA INDEX NAME)



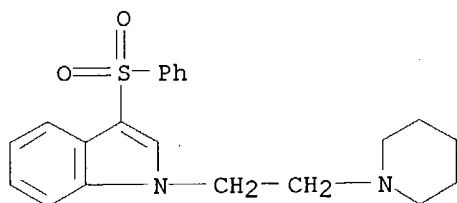
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CN 1H-Indole, 5-methoxy-3-(phenylsulfonyl)-1-[3-(1-pyrrolidinyl)propyl]-  
(9CI) (CA INDEX NAME)



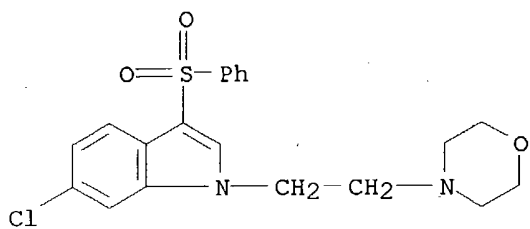
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CN 1H-Indole, 5-methoxy-3-(phenylsulfonyl)-1-[2-(1-pyrrolidinyl)ethyl]- (9CI)  
(CA INDEX NAME)



RN 633292-39-4 CAPLUS  
CN 1H-Indole, 3-(phenylsulfonyl)-1-[2-(1-piperidinyl)ethyl]- (9CI) (CA INDEX  
NAME)

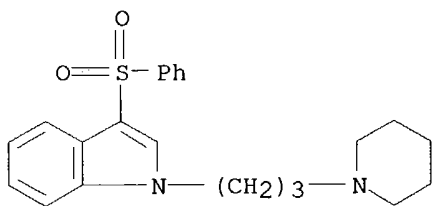


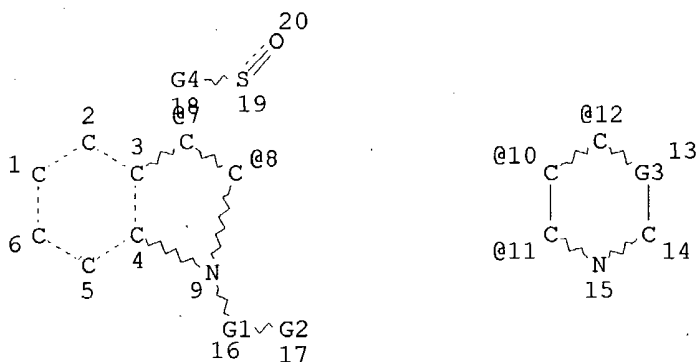
RN 633292-42-9 CAPLUS  
CN 1H-Indole, 6-chloro-1-[2-(4-morpholinyl)ethyl]-3-(phenylsulfonyl)- (9CI)  
(CA INDEX NAME)



RN 633292-43-0 CAPLUS

CN 1H-Indole, 3-(phenylsulfonyl)-1-[3-(1-piperidinyl)propyl]- (9CI) (CA  
INDEX NAME)





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REP G3=(0-2) CH
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SAMPLE SCREEN SEARCH COMPLETED - 20878 TO ITERATE

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SEARCH TIME: 00.00.01

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1 ANSWERS

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                        BATCH    **COMPLETE**
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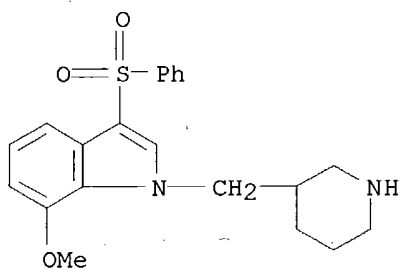
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L2  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2004 ACS on STN
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      (CA INDEX NAME)
OTHER NAMES:
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FS   3D CONCORD
MF   C21 H24 N2 O3 S
SR   CA
LC   STN Files:  CA, CAPLUS, USPATFULL
DT.CA CAPLUS document type: Patent
RL.P  Roles from patents:  BIOL (Biological study); PREP (Preparation); USES
      (Uses)

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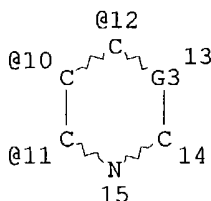
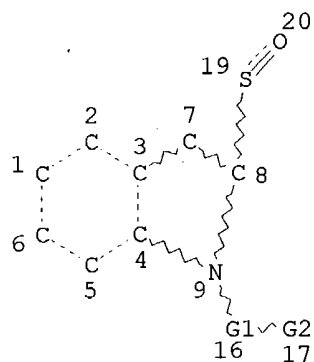
1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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L7 HAS NO ANSWERS

L7 STR



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VAR G2=12/10/11

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STEREO ATTRIBUTES: NONE

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100.0% PROCESSED 127 ITERATIONS

SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 1864 TO 3216

PROJECTED ANSWERS: 0 TO 0

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=> s 17 ful

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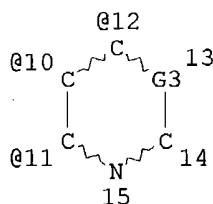
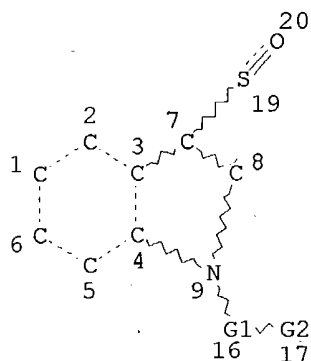
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0 ANSWERS

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 REP G3=(0-2) CH  
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 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RSPEC 11 9  
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STEREO ATTRIBUTES: NONE

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100.0% PROCESSED 7665 ITERATIONS 83 ANSWERS  
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L5 83 SEA SSS FUL L3

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 COST IN U.S. DOLLARS  
 FULL ESTIMATED COST

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| 159.71           | 159.92        |

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FILE COVERS 1907 - 18 Oct 2004 VOL 141 ISS 17  
FILE LAST UPDATED: 17 Oct 2004 (20041017/ED)

This file contains CAS Registry Numbers for easy and accurate  
substance identification.

=> s 15

L6 1 L5

=> d bib abs

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:80650 CAPLUS

DN 140:146005

TI Preparation of 1-heterocyclylalkyl-3-sulfonylindoles and indazoles as  
5-HT6 ligands

IN Bernotas, Ronald Charles; Lenicek, Steven Edward

PA Wyeth, John, and Brother Ltd., USA

SO PCT Int. Appl., 46 pp.

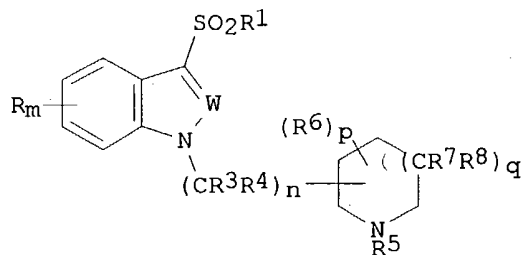
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

|      | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
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| PI   | WO 2004009548   | A1   | 20040129 | WO 2003-US22485 | 20030717 |
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| PRAI | US 2002-396958P   | P    | 20020718 |                 |          |
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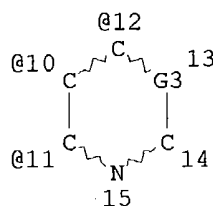
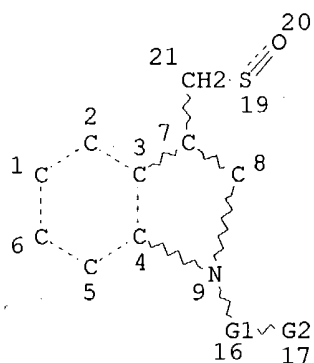
I

AB Title compds. [I; W = N, CR2; R = halo, cyano, OCO2R9, CO2R10, CONR11R12, SOxR13, NR14R15, OR16, COR17, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl; R1 = (substituted) alkyl, cycloalkyl, aryl,

heteroaryl, etc.; R2 = H, halo, (substituted) alkyl, alkoxy, cycloalkyl, aryl, heteroaryl; R3, R4 = H, (substituted) alkyl; R5 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloheteroalkyl, aryl, heteroaryl; R6 = (substituted) alkyl, cycloalkyl, alkenyl, alkynyl; R7, R8 = H, (substituted) alkyl, cycloalkyl, alkenyl, alkynyl; m, n, p = 0-3; q, x = 0-2; R9, R10, R13, R17 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloheteroalkyl, aryl, heteroaryl; R11, R12, R14, R15 = H, (substituted) alkyl; NR11R12, NR14R15 = 5-7 membered ring; R16 = (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloheteroalkyl, aryl, heteroaryl; R18 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloheteroalkyl, aryl, heteroaryl], were prepared. Thus, 3-(phenylsulfonyl)-1H-indole (preparation given) in DMF at 0° was treated with sodium hydride in mineral oil stirred for 2 h at ambient temperature, treated with

4-(toluene-4-sulfonyloxymethyl)piperidine-1-carboxylic acid tert-Bu ester and the mixture was stirred for 16 h at 55° to give tert-Bu 4-[3-(phenylsulfonyl)-1H-indol-1-ylmethyl]piperidine-1-carboxylate. The latter was stirred with 4N HCl in dioxane to give 82% 3-(phenylsulfonyl)-1-(piperidin-4-ylmethyl)-1H-indole hydrochloride, which showed 5-HT6 binding with  $K_i = 27$  nM.

=> d l10  
 L10 HAS NO ANSWERS  
 L10 STR



REP G1=(0-5) CH  
 VAR G2=12/10/11  
 REP G3=(0-2) CH  
 NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RSPEC 11 9  
 NUMBER OF NODES IS 20

STEREO ATTRIBUTES: NONE

=> s l10 ful  
 FULL SEARCH INITIATED 12:44:43 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 1331 TO ITERATE

100.0% PROCESSED 1331 ITERATIONS  
 SEARCH TIME: 00.00.01

0 ANSWERS

L12 0 SEA SSS FUL L10

9475

=> s (indol?(1)(sulfon? or sulphon?))(1)5ht!

95646 INDOL?

266079 SULFON?

1682 SULPHON?

2211 5HT!

L1 4 (INDOL?(L)(SULFON? OR SULPHON?))(L)5HT!

=> d bib abs 1-4

L1 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:396852 CAPLUS

DN 138:401602

TI Preparation of N-(1H-indol-5-yl) sulfonamide derivatives with 5-HT6  
receptor antagonist activity, their preparation, and their application as  
medicaments for CNS diseases

IN Merce-Vidal, Ramon; Andaluz-Mataro, Blas; Frigola-Constansa, Jordi

PA Laboratorios Del Esteve, S.A., Spain

SO PCT Int. Appl., 50 pp.

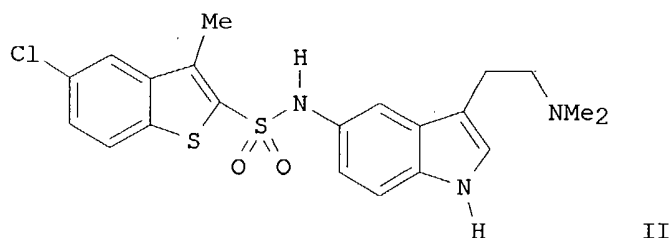
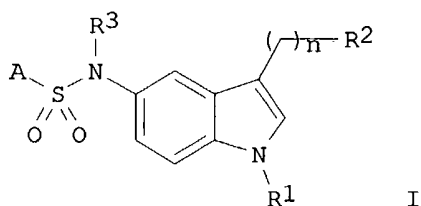
CODEN: PIXXD2

DT Patent

LA Spanish

FAN.CNT 1

|      | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|------|---|------|----------|-----------------|----------|
| PI   | WO 2003042175   | A1   | 20030522 | WO 2002-ES518   | 20021108 |
|      | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  |      |          |                 |          |
|      | CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,     |      |          |                 |          |
|      | GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,     |      |          |                 |          |
|      | LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,     |      |          |                 |          |
|      | PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,     |      |          |                 |          |
|      | UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,     |      |          |                 |          |
|      | TJ, TM  |      |          |                 |          |
|      | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, |      |          |                 |          |
|      | CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,     |      |          |                 |          |
|      | PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,     |      |          |                 |          |
|      | NE, SN, TD, TG  |      |          |                 |          |
|      | ES 2187300  | A1   | 20030516 | ES 2001-2517    | 20011114 |
|      | ES 2187300  | B1   | 20040616 |                 |          |
|      | EP 1445252  | A1   | 20040811 | EP 2002-785439  | 20021108 |
|      | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  |      |          |                 |          |
|      | IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK              |      |          |                 |          |
|      | US 2003191124   | A1   | 20031009 | US 2002-293206  | 20021113 |
| PRAI | ES 2001-2517  | A    | 20011114 |                 |          |
|      | WO 2002-ES518   | W    | 20021108 |                 |          |
| OS   | MARPAT 138:401602   |      |          |                 |          |
| GI   |   |      |          |                 |          |



AB The invention relates to novel N-(1H-indol-5-yl)-substituted sulfonamide derivs. I and their physiol. acceptable salts [wherein: A = (un)substituted 5- or 6-membered heteroaryl, bicyclic heteroaryl, phenylalkyl,  $\beta$ -styryl, naphthyl, 2,2-diphenylethyl, aryl-W-aryl, or substituted Ph; R1 = H, alkyl, benzyl; n = 0-4; R2 = NR4R5, cyclic (un)saturated amino (e.g., piperidino, piperazino, etc.); R3, R4, R5 = H or alkyl; substituents on A = H, F, Cl, Br, alkyl, alkoxy, alkylthio, CF3, cyano, NO2, NR4R5; W = bond, CH2, O, S, or NR4]. The invention also relates to methods of preparing I, to their application as medicaments for human and/or veterinary therapy, and to pharmaceutical compns. containing them. A group of 53 example compds. is listed and claimed, and 5 example preps. are given. For instance, sulfonamidation of 5-amino-3-[2-(dimethylamino)ethyl]-1H-indole with 5-chloro-3-methylbenzo[b]thiophene-2-sulfonyl chloride in pyridine at room temperature gave 82% invention compound

II.

In a test for inhibition of binding of [3H]-LSD to recombinant human 5-HT6 receptors expressed in HEK-293 cell membranes, II had an IC50 of 0.13 nM. Thirteen other I had IC50 values ranging from 0.28 nM to 24.3 nM.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1994:93 CAPLUS

DN 120:93

TI Disposition of sumatriptan in laboratory animals and humans

AU Dixon, C. M.; Saynor, D. A.; Andrew, P. D.; Oxford, J.; Bradbury, A.; Tarbit, M. H.

CS Dep. Drug Metab. III, Glaxo Group Res. Ltd., Ware/Herts, SG12 0DP, UK

SO Drug Metabolism and Disposition (1993), 21(5), 761-9

CODEN: DMDSAI; ISSN: 0090-9556

DT Journal

LA English

AB Sumatriptan is a new **5HT1**-like agonist and a novel and effective treatment for migraine. The disposition of the <sup>14</sup>C-radiolabeled drug in laboratory animals and humans after oral and parenteral administration is described. Oral absorption of sumatriptan is essentially complete in dogs and rabbits, but only .apprx.50% in rat. In humans, at least 57% of an oral dose is absorbed. Bioavailabilities are species-dependent (14, 23, 37, and 58% in humans, rabbits, rats and dogs) reflecting differing degrees of first-pass metabolism These data correlate well with hepatic extraction



ratios, which are highest in rabbits and humans and lowest in dogs. Renal clearance is significant in all species and exceeds the glomerular filtration rate in rats, rabbits, and humans, but not in dogs. The compound is a weak base that shows widespread tissue distribution, including passage across the placental barrier and into milk, but low CNS penetration. Protein binding of sumatriptan is low in all species. Elimination half-lives of sumatriptan are .apprx.1 h in rats and rabbits, and .apprx.2 h in dogs and humans. In all species the majority of the absorbed dose is renally excreted, predominantly as the **indole** acetic acid metabolite and unchanged drug. Interesting species differences are evident in the metabolism of sumatriptan. Thus, in humans, the **indole** acetic acid metabolite is excreted partly as a glucuronide, whereas in animals conjugation of this metabolite is not apparent. In addition, demethylation of the **sulfonamide** side chain of the drug is evident in rodent and lagomorph species only.

L1 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1991:81599 CAPLUS

DN 114:81599

TI Preparation of indole derivatives as 5HT1-like receptor agonists

IN North, Peter Charles; Johnson, Martin Redpath; Oxford, Alexander William

PA Glaxo Group Ltd., UK

SO Eur. Pat. Appl., 18 pp.

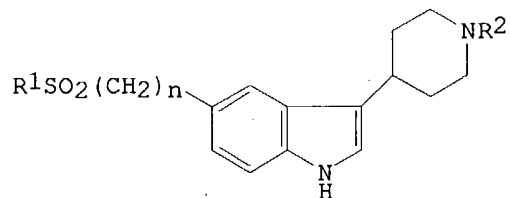
CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

|      | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|------|---|------|----------|-----------------|----------|
| PI   | EP 382570   | A1   | 19900816 | EP 1990-301419  | 19900209 |
|      | EP 382570   | B1   | 19931208 |                 |          |
|      | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL |      |          |                 |          |
|      | CA 2009745  | AA   | 19900810 | CA 1990-2009745 | 19900209 |
|      | NO 9000636  | A    | 19900813 | NO 1990-636     | 19900209 |
|      | AU 9049315  | A1   | 19900816 | AU 1990-49315   | 19900209 |
|      | JP 02300184   | A2   | 19901212 | JP 1990-31320   | 19900209 |
|      | JP 2941333  | B2   | 19990825 |                 |          |
|      | US 5001135  | A    | 19910319 | US 1990-477466  | 19900209 |
|      | ZA 9000974  | A    | 19911030 | ZA 1990-974     | 19900209 |
|      | AT 98230  | E    | 19931215 | AT 1990-301419  | 19900209 |
|      | DD 297162   | A5   | 19920102 | DD 1990-343333  | 19900808 |
|      | CN 1058778  | A    | 19920219 | CN 1990-107591  | 19900809 |
|      | HU 58721  | A2   | 19920330 | HU 1990-4945    | 19900809 |
| PRAI | GB 1989-3036  |      | 19890210 |                 |          |
|      | EP 1990-301419  |      | 19900209 |                 |          |
| OS   | MARPAT 114:81599                                      |      |          |                 |          |
| GI   |   |      |          |                 |          |



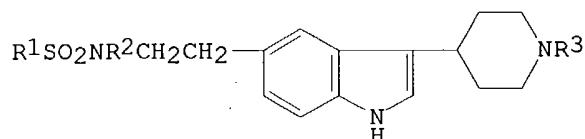
I

AB The title compds. I (R1 = C1-6 alkyl; R2 = H, C1-3 alkyl; n = 0-3) and pharmaceutically acceptable salts thereof were prepared I are **5HT1**-like receptor agonists useful in the treatment of migraine (no data). A

mixture of Et vinyl sulfone, palladium acetate, tri-o-tolylphosphine, Et<sub>3</sub>N, and 5-bromo-3-(1-methyl-4-piperidinyl)-1H-indole in DMF was stirred at 100-110° for 4 h to give a product, which was hydrogenated over Pd/C in EtOH containing aqueous HCl to give I (R<sub>1</sub> = Et; n = 2; R<sub>2</sub> = Me).HCl. Pharmaceutical formulations comprising I are given.

L1 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1990:458949 CAPLUS  
 DN 113:58949  
 TI 3-(4-Piperidinyl)-5-[(2-sulfonylamino)ethyl]indoles as 5HT<sub>1</sub>-like receptor agonists, their preparation, and formulations containing them  
 IN Coates, Ian Harold  
 PA Glaxo Group Ltd., UK  
 SO Eur. Pat. Appl., 15 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 1

|      | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|------|---|------|----------|-----------------|----------|
| PI   | EP 354777   | A2   | 19900214 | EP 1989-308083  | 19890809 |
|      | EP 354777   | A3   | 19910410 |                 |          |
|      | EP 354777   | B1   | 19930804 |                 |          |
|      | R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE |      |          |                 |          |
|      | DK 8903912  | A    | 19900211 | DK 1989-3912    | 19890809 |
|      | FI 8903751  | A    | 19900211 | FI 1989-3751    | 19890809 |
|      | NO 8903205  | A    | 19900212 | NO 1989-3205    | 19890809 |
|      | AU 8939455  | A1   | 19900215 | AU 1989-39455   | 19890809 |
|      | JP 02091068   | A2   | 19900330 | JP 1989-206606  | 19890809 |
|      | JP 2941309  | B2   | 19990825 |                 |          |
|      | ZA 8906067  | A    | 19900627 | ZA 1989-6067    | 19890809 |
|      | US 5036078  | A    | 19910730 | US 1989-391036  | 19890809 |
|      | AT 92485  | E    | 19930815 | AT 1989-308083  | 19890809 |
| PRAI | GB 1988-19024   |      | 19880810 |                 |          |
|      | EP 1989-308083  |      | 19890809 |                 |          |
| OS   | MARPAT 113:58949                                      |      |          |                 |          |
| GI   |   |      |          |                 |          |



I

AB The title compds. (I; R<sub>1</sub> = C<sub>1</sub>-6 alkyl; R<sub>2</sub> = H, C<sub>1</sub>-6 alkyl; R<sub>3</sub> = H, C<sub>1</sub>-3 alkyl) and their pharmaceutically acceptable salts and solvates, useful as 5HT<sub>1</sub>-like receptor agonists (no data) for the treatment of migraine, were prepared Reaction of 1-H-indole-5-ethanamine with MeSO<sub>2</sub>Cl, followed by condensation with 1-methyl-4-piperidone in the presence of KOH and hydrogenation of the resulting (tetrahydropyridinyl)indole derivative over 10% Pd/C at room temperature, workup, and treatment with HCl, gave I·HCl (R<sub>1</sub> = R<sub>3</sub> = Me, R<sub>2</sub> = H). Formulations containing I are given.